

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/588, 140
Source: JFWO
Date Processed by STIC: 08/10/2006

ENTERED



IFWO

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/588,140

DATE: 08/10/2006

TIME: 10:59:47

Input Set : A:\44352-0010-00-US sequence listing(pct 05 234).txt
 Output Set: N:\CRF4\08102006\J588140.raw

3 <110> APPLICANT: Lifenza Co., Ltd.
 5 <120> TITLE OF INVENTION: PROTEIN WITH ACTIVITY OF HYDROLYZING DEXTRAN, STARCH, MUTAN,
 6 INULIN AND LEVANN, GENE ENCODING THE SAME, CELL EXPRESSING THE
 7 SAME, AND PRODUCTION METHOD THEREOF
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/588,140
 C--> 9 <141> CURRENT FILING DATE: 2006-07-31
 W--> 0 <130> FILE REFERENCE:
 9 <150> PRIOR APPLICATION NUMBER: KR2004-0006185
 10 <151> PRIOR FILING DATE: 2004-01-30
 12 <160> NUMBER OF SEQ ID NOS: 4
 14 <170> SOFTWARE: KopatentIn 1.71
 16 <210> SEQ ID NO: 1
 17 <211> LENGTH: 608
 18 <212> TYPE: PRT
 19 <213> ORGANISM: Artificial Sequence
 21 <220> FEATURE:
 22 <223> OTHER INFORMATION: S. cerevisiae/pYES2-LSD1
 25 <400> SEQUENCE: 1
 26 Met Thr Leu Ile Tyr Val Pro Ser Ile Phe Thr Met Val Pro Ser Ile
 27 1 5 10 15
 29 Thr Arg Ile Val Leu Val Asn Ile Leu Leu Ala Thr Leu Val Leu Gly
 30 20 25 30
 32 Ala Ala Val Leu Pro Arg Asp Asn Arg Thr Val Cys Gly Ser Gln Leu
 33 35 40 45
 35 Cys Thr Trp Trp His Asp Ser Gly Glu Ile Asn Thr Gly Thr Pro Val
 36 50 55 60
 38 Gln Ala Gly Asn Val Arg Gln Ser Arg Lys Tyr Ser Val His Val Ser
 39 65 70 75 80
 41 Leu Ala Asp Arg Asn Gln Phe Tyr Asp Ser Phe Val Tyr Glu Ser Ile
 42 85 90 95
 44 Pro Arg Asn Gly Asn Gly Arg Ile Tyr Ser Pro Thr Asp Pro Pro Asn
 45 100 105 110
 47 Ser Asn Thr Leu Asn Ser Ser Ile Asp Asp Gly Ile Ser Ile Glu Pro
 48 115 120 125
 50 Ser Leu Gly Ile Asn Met Ala Trp Ser Gln Phe Glu Tyr Arg Arg Asp
 51 130 135 140
 53 Val Asp Ile Lys Ile Thr Thr Ile Asp Gly Ser Ile Leu Asp Gly Pro
 54 145 150 155 160
 56 Leu Asp Ile Val Ile Arg Pro Thr Ser Val Lys Tyr Ser Val Lys Arg
 57 165 170 175
 59 Cys Val Gly Gly Ile Ile Arg Val Pro Tyr Asp Pro Asn Gly Arg
 60 180 185 190
 62 Lys Phe Ser Val Glu Leu Lys Ser Asp Leu Tyr Ser Tyr Leu Ser Asp

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63	195	200	205	
65	Gly Ser Gln Tyr Val Thr Ser	Gly Gly Ser Val Val	Gly Val Glu Pro	
66	210	215	220	
68	Lys Asn Ala Leu Val Ile Phe Ala Ser Pro Phe	Leu Pro Arg Asp Met		
69	225	230	235	240
71	Val Pro His Met Thr Pro His Asp Thr	Gln Thr Met Lys Pro	Gly Pro	
72	245	250	255	
74	Ile Asn Asn Gly Asp Trp Gly Ser Lys Pro	Ile Leu Tyr Phe Pro Pro		
75	260	265	270	
77	Gly Val Tyr Trp Met Asn Glu Asp Thr Ser	Gly Asn Pro Gly Lys Leu		
78	275	280	285	
80	Gly Ser Asn His Met Arg Leu Asp Pro Asn Thr	Tyr Trp Val His Leu		
81	290	295	300	
83	Ala Pro Gly Ala Tyr Val Lys Gly Ala Ile	Glu Tyr Phe Thr Lys Gln		
84	305	310	315	320
86	Asn Phe Tyr Ala Thr Gly His Gly Val Leu	Ser Gly Glu Asn Tyr Val		
87	325	330	335	
89	Tyr Gln Ala Asn Ala Ala Asp Asn Tyr	Tyr Ala Val Lys Ser Asp Gly		
90	340	345	350	
92	Thr Ser Leu Arg Met Trp Trp His Asn Asn	Leu Gly Gly Gln Thr		
93	355	360	365	
95	Trp Phe Cys Met Gly Pro Thr Ile Asn Ala	Pro Pro Phe Asn Thr Met		
96	370	375	380	
98	Asp Phe Asn Gly Asn Ser Asn Ile Ser Ser	Arg Ile Ser Asp Tyr Lys		
99	385	390	395	400
101	Gln Val Gly Ala Tyr Phe Phe Gln Thr Asp	Gly Pro Glu Ile Tyr Glu		
102	405	410	415	
104	Asp Ser Val Val His Asp Val Phe Trp His	Val Asn Asp Asp Ala Ile		
105	420	425	430	
107	Lys Thr Tyr Tyr Ser Gly Ala Ser Ile	Ser Arg Ala Thr Ile Trp Lys		
108	435	440	445	
110	Cys His Asn Asp Pro Ile Ile Gln Met Gly	Trp Thr Ser Arg Asn Leu		
111	450	455	460	
113	Thr Gly Ile Ser Ile Asp Asn Leu His	Val Ile His Thr Arg Tyr Phe		
114	465	470	475	480
116	Lys Ser Glu Thr Val Val Pro Ser Ala	Ile Ile Gly Ala Ser Pro Phe		
117	485	490	495	
119	Tyr Ala Ser Gly Met Thr Val Asp Pro Ser	Glu Ser Ile Ser Met Thr		
120	500	505	510	
122	Ile Ser Asn Val Val Cys Glu Gly	Leu Cys Pro Ser Leu Phe Arg Ile		
123	515	520	525	
125	Thr Pro Leu Gln Ser Tyr Asn Asn Leu	Val Val Lys Asn Val Ala Phe		
126	530	535	540	
128	Pro Asp Gly Leu Gln Thr Asn Pro Ile	Gly Ile Gly Glu Ser Ile Ile		
129	545	550	555	560
131	Pro Ala Ala Ser Gly Cys Thr Met Asp	Leu Glu Ile Thr Asn Trp Thr		
132	565	570	575	
134	Val Lys Gly Gln Lys Val Thr Met Gln Asn	Phe Gln Ser Gly Ser Leu		
135	580	585	590	

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137 Gly Gln Phe Asp Ile Asp Gly Ser Tyr Trp Gly Gln Trp Ser Ile Asn
 138 595 600 605
 143 <210> SEQ ID NO: 2
 144 <211> LENGTH: 2052
 145 <212> TYPE: DNA
 146 <213> ORGANISM: Artificial Sequence
 148 <220> FEATURE:
 149 <223> OTHER INFORMATION: S. cerevisiae/pYLS1
 152 <400> SEQUENCE: 2

153	tgggtgtgtc	ccttgctctg	ccaacgttgt	tgattgttt	catgacat	atctacgtgc	60		
155	cttc	aatatt	tacaatggtc	ccctcaatca	cacgattgt	actggtaac	attctgttgg	120	
157	cgacgttggt	tttggagct	gcagtcttc	cacgagacaa	cagaactgtt	tgccggagtc	180		
159	aactctgcac	atggtggcac	gactccggcg	agataaacac	cggtactcct	gtacaggcag	240		
161	gaaacgttgc	acaatcccga	aagtactctg	tccatgtgag	cctggcagac	cgtaaaccat	300		
163	tctacgactc	tttcgtat	aatcgatac	ctaggaacgg	aatggcaga	atttattctc	360		
165	ccaccgaccc	acctaacagc	aatacattga	atagtagcat	tgacgacggt	atatcaatcg	420		
167	aaccatctct	cggcatcaac	atggcttgg	cccagttcg	atata	gatgtcgaca	480		
169	ttaagattac	tacaatcgat	ggctcaat	tggatggccc	tttggacatt	gttattcggc	540		
171	cgacttctgt	taagtactca	gtcaaaagat	gtgtgggtgg	tatcattatt	agagtccctt	600		
173	atgatcccaa	tggtcgaaaa	ttctctgtt	agttaaagag	tgac	tttac	660		
175	ccgacggttc	gcaatatgt	acctctggag	ggagcgtgg	tgggtgtggag	ccaaaaaaatg	720		
177	ccctgggtat	cttgc	ccttcttgc	cacggat	at	gtacaccac	780		
179	acgacaccca	gacaatgaag	ccgggccc	tcaataatgg	ggactggggt	tcaaaggccta	840		
181	tactctactt	ccgc	cctggc	gtatactgg	tgaacgagga	tacctcttgg	900		
183	agctcggctc	aaatcatatg	cggctggatc	ccaataccta	ctgggtccat	ctagccccag	960		
185	gaggctatgt	gaaaaggagcc	attgagtt	tcac	aaatttctat	gcaacgggtc	1020		
187	atggcggtct	ctc	aggtgag	aactatgtt	atcaggccaa	tc	agctgtat	1080	
189	ccgtcaagag	tgtgcaca	agcttgagaa	tgtgtggca	caacaac	tt	ggaggcggtc	1140	
191	aaacatgtt	ttgc	atgggg	cccaccat	atgcaccg	gttata	atggacttca	1200	
193	acggaaactc	taatatttcc	agccggat	gtgactata	gcagg	tttgg	gc	1260	
195	tccaaacaga	cg	gaccggag	atctacgagg	acag	gtt	ccatgac	1320	
197	ttaatgtat	tgcc	atcaag	acatattt	ccgg	actt	ca	1380	
199	gaaagtgtca	caatgacc	atcatacaga	tgg	gttgc	gtc	acgaaat	1440	
201	tcagcattga	taac	tcgcac	gtc	atccaca	gc	agg	tttgg	1500
203	cttc	cagcaat	cattggagcg	tct	ccatttct	ac	gca	gtc	1560
205	atg	ccatc	catgaccatc	tct	aaacgtgg	at	gactgtt	gat	1620
207	gtat	cactcc	gttca	gagc	tacaacaacc	tt	gttgc	tttcc	1680
209	gact	gcagac	aaatcca	atc	ggaataggag	ag	agcattat	acc	1740
211	caat	ggactt	ggaaatcaca	aactgg	gac	aaa	agtc	acc	1800
213	ttc	cag	gtcacttggc	cag	ttcgata	tc	gatgg	ttc	1860
215	taa	actaa	ctatccc	cat	tcac	at	ttcgt	ttc	1920
217	tgt	atgggg	cc	tt	gcttagt	gt	aaa	aggtag	1980
219	gtt	catgt	tct	tagtt	gaa	ttt	ttt	tc	2040
221	aaaa	aaaa	aa	aa	aaaa	aaaa	aaaa	aaaa	2052
224	<210>	SEQ ID NO:	3						
225	<211>	LENGTH:	18						
226	<212>	TYPE:	DNA						
227	<213>	ORGANISM:	Artificial Sequence						
229	<220>	FEATURE:							

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230 <223> OTHER INFORMATION: L. starkeyi DX-F primer(sense)

233 <400> SEQUENCE: 3

18

234 gtcccttgag ctcccaac

237 <210> SEQ ID NO: 4

238 <211> LENGTH: 23

239 <212> TYPE: DNA

240 <213> ORGANISM: Artificial Sequence

242 <220> FEATURE:

243 <223> OTHER INFORMATION: L. starkeyi DX-R primer(antisense)

246 <400> SEQUENCE: 4

23

247 tcaactagaa ttcatgaact tcc

VERIFICATION SUMMARY
PATENT APPLICATION: US/10/588,140

DATE: 08/10/2006
TIME: 10:59:48

Input Set : A:\44352-0010-00-US sequence listing(pct 05 234).txt
Output Set: N:\CRF4\08102006\J588140.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:0 M:201 W: Mandatory field data missing, <130> FILE REFERENCE